UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,595	05/31/2007	Gerd Breiter	DE920030045US1	9859

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CHEEMA, UMAR

ART UNIT	PAPER NUMBER
2444	

NOTIFICATION DATE	DELIVERY MODE
03/02/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

poiplaw2@us.ibm.com

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/583,595</td><td>Applicant(s)
BREITER ET AL.</td><td></td></tr>
<tr><td>Examiner
UMAR CHEEMA</td><td>Art Unit
2444</td><td></td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>*26 January 2011*</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *12-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendments

1.   This action is in response to the Request for Continued Examination (RCE) transmitted

on 12/29/2010. Claims 12-26 are pending in this action with claims 12-26 being further

amended.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 12/29/2010 has been entered.

Response to Arguments

3.   Applicant's argument's with respect to drawing being objected have been fully

considered and are withdrawn in view of new drawing Figure 1, submitted pointing out Prior

Art.

4.   Applicant's arguments with respect to claims 12-26 have been considered but are moot in

view of the new ground(s) of rejection.

Claim Objections

5.   Claims 12-26 are objected to because of the following informalities: Claims 12-26 are

objected because of grammatical mistakes, for example, applicant should use "a management

system, a method and a computer program product," instead of "management system, method

and computer program product. Along with these mistakes, applicant is advised to review all of

the claims carefully for more for any future grammar, stylistic changes such as use of indefinite

article to introduce a claim, the use of semicolons between elements, and the parenthetical

reference numbers in future response.

6.   The claims 11, 17, and 22 are objected to because they include reference characters

which are not enclosed within parentheses.

        Reference characters corresponding to elements recited in the detailed description of the

drawings and used in conjunction with the recitation of the same element or group of elements in

the claims should be enclosed within parentheses so as to avoid confusion with other numbers or

characters which may appear in the claims. See MPEP § 608.01(m).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

The factual inquiries set forth in Graham **v.** John Deere Co., 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 12-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al.

(hereinafter Bauer) (US Patent No. 6,690,788) in view of AAPA (Applicant's Admitted Prior

Art) (Fig.1) (hereinafter AAPA) and further in view of Feridun et al. (hereinafter Feridun) (US

Patent No. 6,336,139).

8. As to claims 1-11, (Cancelled).

9. As to claim 12, Bauer discloses management system for managing distributed resources

(11-16:61-66) (**135**) (**resource manager**) (**see Fig. 1**) comprising a digital computer managed

system (**134**) (**Integrated Work Management Engine**) (**see Fig. 1**) that can execute management

workflows in order to actively control the managed resources (11-16; 61-66) (**Work**

Management engine is responsible for initiation and control of all workflow functions within

the system) (**see at least col. 6, lines 8-24**), said stateful web correlation services 74, 75, 76,

providing multiple autonomic correlation services monitoring and controlling part of said

managed system that manage different functional parts of the managed system in cooperation

with the workflow engine (88) to query the state of managed resources 61-66 and to

communicate with the event server 51 while employing correlation engine (174, 175) (**objectives and responsibilities of workflow management system based on rules engine and rules data) (see at least col. 8, line 58-col. 9, line 56**) and a set of rules (184, 185, 196) (**rules engine**) defining how underlying resources (61-66) shall be managed in a correlation model, as said controller (44) communicates with the stateful web correlation services (74-76) to instantiate said stateful web correlation services 74, 75, 76 according to said correlation model (**see at least rules engine and rules data for customer care center in integrated work management system) (see col. 9, lines 9-56**).

10.   Although Bauer discloses the substantial features of applicant's claimed invention, Bauer expressly fails to disclose: providing a management client 41 coupled to a controller 44 which communicates with a correlation server 48 and with an event server 51 having managed resources 61-66 to be managed, said correlation server 48 comprising a web service container 71 with correlation services implemented as stateful web correlation services 74, 75, 76 which communicate with each other and with a workflow engine 88.

11.   In analogous teaching, AAPA exemplifies this wherein AAPA discloses this where providing a management client 41 coupled to a controller 44 which communicates with a correlation server 48 and with an event server 51 having managed resources 61-66 to be managed, said correlation server 48 comprising a web service container 71 with correlation services implemented as stateful web correlation services 74, 75, 76 which communicate with each other and with a workflow engine 88 (**see AAPA: at least Fig. 1, ¶ (0040), Workflow Engine 8 can execute Management Workflows in order to actively control distributed application or resources 11-16 over a Network 17, as indicated by Arrow 18. Arrows 21, 22**

indicate that resources 11-16 communicate with Correlation Engine 2. Arrow 26, 27 indicate

that resources 11-16 communicate with a Configuration Database 30. As indicated by Arrow

31, Correlation Engine 2 communicates with Configuration Database 30. Configuration

Database 30 is hosted by a Database Server 32).

12.   Thus, given the teaching of AAPA, it would have been obvious to one of the ordinary

skill person in the art to combine the teaching of Bauer into AAPA for the management of

multiple distributed resources. Motivation for doing so would have been well known in the art

for monitoring and managing distributed applications or resources in a management system.

13.   Although Bauer-AAPA discloses the substantial features of applicant's claimed

invention, Bauer expressly fails to disclose: wherein services are autonomic correlation services.

Nevertheless, autonomic correlation services were well known in the art at the time of the

present invention.

14.   In analogous teaching, Feridun exemplifies this wherein Feridun discloses wherein

services are autonomic correlation services (**see at least abstract, col. 2, lines 21-25; method of**

event correlation that preferably implemented within a distributed environment).

15.   Thus, given the teaching of Feridun, it would have been obvious to one of the ordinary

skill person in the art at the time of the invention to modify the teaching of Bauer to expressly

disclose the management system with event correlation services. It would have been

advantageously provide more efficient event correlation techniques within a distributed computer

environment wherein distributed monitors use events to convey status changes in monitoring

objects within the environment (Feridun: col. 1, lines 52-55).

16.   As to claim 13, the combination of Bauer AAPA and Feridun disclose management

system according to claim 12, wherein Feridun further discloses the stateful web correlation

services (74-76) directly (92) communicate with managed resources (61-66) (see Feridun : at

least correlation rules adapted to recognize a given pattern of one or more events indicative of

given condition) (see Fig. 8) for the motivation of well taught in Feridun, to provide more

efficient event correlation techniques within distributed computer environment wherein

distributed monitors use events to convey status changes in monitored objects within the

environment (see Feridun: col. 1, lines 52-55).

17.   As to claim 14, the combination of Bauer-AAPA and Feridun disclose management

system according to claim 12, wherein Feridun further discloses rules for filtering low-level

events issued by managed resources (61-66) are deployed into an event service application (50)

that is used to filter high-level events from low-level events (see Feridun: at least abstract, col.

2, lines 4-*9; set of simple or "low-level" correlation rules which may be useful in* recognizing a

given pattern or one or more events indicative of given condition sought to be control or

monitor) for the motivation of well taught in Feridun, to provide more efficient event correlation

techniques within distributed computer environment wherein distributed monitors use events to

convey status changes in monitored objects within the environment (see Feridun: col. 1, lines

52-55).

18.   As to claim 15, the combination of Bauer-AAPA and Feridun disclose management

system according to claim 14, wherein Feridun further discloses the controller (44)

communicates with the event service application (50) (see Feridun: at least abstract, col. 2, lines

4-9; *set of simple or "low-level" correlation rules which may be useful in recognizing a given*

pattern or one or more events indicative of given condition sought to be control or monitor) for

the motivation of well taught in Feridun, to provide more efficient event correlation techniques

within distributed computer environment wherein distributed monitors use events to convey

status changes in monitored objects within the environment (see Feridun: col. 1, lines 52-55).

19.   As to claim 16, the combination of Bauer-AAPA and Feridun disclose management

system according to claim 12, wherein AAPA further discloses the stateful web correlation

services Correlation Services modeled as Stateful Web Services stateful web services to

instantiate said correlation services according to a user-defined correlation model, whereby each

of said stateful web correlation services can introspect each other and subscribe to events issued

by each other, for managing said managed system, wherein each single correlation service

manages part of the overall system, and in said management of part of the overall system, a

single correlation service checks whether it contains rules that react to high-level events issued

by subordinate correlation services, and uses web service introspection to see which events are

issued by another correlation service (see AAPA: Fig. 1, ¶ (0042), when low-level events are

received from managed resources 11-16, as indicated by Arrows 21, 22, Correlation Engine 2

applies event filtering and aggregation rules, as indicated by Arrow 5, in order to filter

meaningful information, so called high-level events, out of the mass of received events . . . . as

indicated by Arrow 31. As a result of decision making, workflows can be invoked, as indicated by

Arrow 9, in order to modify the managed system, as indicated by Arrow 18, and to solve

problems etc.) for the motivation of well taught in the AAPA to receive and manage resources

based on user-defined and decision making rules.

20.   As to claim 17, Bauer discloses method for managing distributed resources in a digital

computer, (**135**) (**resource manager**) (**see Fig. 1**), comprising: steps executed by digital

computer managed system having an internal control system implementing a) a user defined

correlation model comprising the definitions of several stateful web correlation services 74, 75,

76 for different functional parts of the managed system providing multiple autonomic correlation

services for monitoring and controlling part of said distributed system (**Work Management**

engine is responsible for initiation and control of all workflow functions within the system)

(**see at least col. 6, lines 8-24**); and b) wherein a controller of said internal control system

instantiates stateful web correlation services (74-76) to run in accordance with the definitions of

the Correlation Model (**rules engine and rules data for customer care center in integrated work**

management system) (**see at least col. 9, lines 9-56**).

21.   Although Bauer discloses substantial features of applicant's claimed invention, Bauer

expressly fails to disclose: wherein services are autonomic correlation services. Nevertheless,

autonomic correlation services were well known in the art at the time of the present invention.

22.   In analogous teaching, Feridun exemplifies this wherein Feridun discloses wherein

services are autonomic correlation services (**see at least abstract, col. 2, lines 21-25; method of**

event correlation that preferably implemented within a distributed environment).

23.   Thus, given the teaching of Feridun, it would have been obvious to one of the ordinary

skill person in the art at the time of the invention to modify the teaching of Bauer to expressly

disclose the management system with event correlation services. It would have been

advantageously provide more efficient event correlation techniques within a distributed computer

environment wherein distributed monitors use events to convey status changes in monitoring

objects within the environment (Feridun: col. 1, lines 52-55).

24.   Although Bauer discloses the substantial features of applicant's claimed invention, Bauer

expressly fails to disclose: c) wherein said user defined correlation model defines how

underlying resoureces (61-66) shall be managed as said controller (44) communicates with the

stateful web correlation services (74-76) to instantiate said stateful web correlation services 74,

75, 76 according to said correlation model.

25.   In analogous teaching, AAPA exemplifies this wherein AAPA discloses this where c)

wherein said user defined correlation model defines how underlying resoureces (61-66) shall be

managed as said controller (44) communicates with the stateful web correlation services (74-76)

to instantiate said stateful web correlation services 74, 75, 76 according to said correlation model

(see AAPA: Fig. 1, ¶ (0042), user-defined rules contained in the Rules Base 6 describe certain

specific events or pattern of events that indicate problems within the managed system. When

problems are detected management rules are used to draw the right management decisions

and, thus, to solve the problem, as indicated by Arrow 7. Decision making is also based on the

state of the managed system; the state of all resources 11-16 can be queried using the

Configuration Database 30, as indicated by Arrow 31. As a result of decision making,

workflows can be invoked, as indicated by Arrow 9, in order to modify the managed system, as

indicated by Arrow 18, and to solve problems).

26.   Thus, given the teaching of AAPA, it would have been obvious to one of the ordinary

skill person in the art to combine the teaching of Bauer into AAPA for the management of

multiple distributed resources. Motivation for doing so would have been well taught in the

AAPA to receive and manage resources based on user-defined and decision making rules.

27.   As to claim 18, the combination of Bauer-AAPA and Feridun disclose method according

to claim 17, wherein Feridun further comprising handles to all of the resources managed by a

single one of said stateful web correlation service (74-76) are stored within that single stateful

web correlation service (see at least abstract, col. 2, lines 4-9; recognizing a given pattern or

one or more events indicative of given condition sought to be control or monitor) for the

motivation of well taught in Feridun, to provide more efficient event correlation techniques

within distributed computer environment wherein distributed monitors use events to convey

status changes in monitored objects within the environment (see Feridun: col. 1, lines 52-55).

28.   As to claim 19, the combination of Bauer-AAPA and Feridun disclose the method

according to claim 17, wherein Feridun further comprising, high-level events to which a specific

single one of said stateful web correlation service (74-76) shall react, and in that respective

single one of said stateful web correlation service (74-76) creates subscriptions with an event

service (50) in order to be notified when such events are detected (see at least abstract, col. 2,

lines 4-*9; set of simple or "low-level" correlation rules which may be useful in recognizing a*

given pattern or one or more events indicative of given condition sought to be control or

monitor) for the motivation of well taught in Feridun, to provide more efficient event correlation

techniques within distributed computer environment wherein distributed monitors use events to

convey status changes in monitored objects within the environment (see Feridun: col. 1, lines

52-55).

29.   As to claim 20, the combination of Bauer-AAPA and Feridun discloses method according

to claim 17, wherein AAPA further comprising, the correlation model provides set of rules that

describe how the managed resources shall be managed; said rules being triggered by detected

high-level events, and include queries on resource states and trigger the execution of

management workflows; and said correlation model defines a set of high-level events which can

be issued by the Correlation Service as a result of said rules, and if detected problems cannot be

resolved by a stateful web correlation service; a higher-level stateful web correlation services can

subscribe for these events to create a hierarchical network as said higher-level stateful web

correlation services higher-level stateful web correlation services use Web Service introspection

to see which events are issued by another one of said stateful web correlation service (75, 76)

(see AAPA: Fig. 1, ¶ (0042), when low-level events are received from managed resources 11-16,

as indicated by Arrows 21, 22, Correlation Engine 2 applies event filtering and aggregation

rules, as indicated by Arrow 5, in order to filter meaningful information, so called high-level

events, out of the mass of received events . . . . as indicated by Arrow 31. As a result of decision

making, workflows can be invoked, as indicated by Arrow 9, in order to modify the managed

system, as indicated by Arrow 18, and to solve problems etc.) for the motivation of well taught

in the AAPA to receive and manage resources based on user-defined and decision making rules.

30.   As to claim 21, the combination of Bauer-AAPA and Feridun discloses the method

according to claim 17, wherein Feridun further comprising, the stateful web correlation services

(74-76) trigger the execution of workflows in order to actively manage their resources (61-66)

(see Feridun : at least correlation rules adapted to recognize a given pattern of one or more

events indicative of given condition) (see Fig. 8) for the motivation of well taught in Feridun, to

provide more efficient event correlation techniques within distributed computer environment

wherein distributed monitors use events to convey status changes in monitored objects within the

environment (see Feridun: col. 1, lines 52-55).

31.   As to claims 22-26, these claimed limitation has already been addressed previously

rejected claims 17-21, except being computer program product stored in the internal memory of

a digital computer, therefore, are rejected for at least same rational as claims 17-21. Furthermore,

with regards to claims 22-26 being computer program product, it would have been obvious for

the method claims of 17-21 to have been form through the process of computer program product

of claims 22-26.

Conclusion

32.   Examiner has cited particular paragraphs, figures, columns and line numbers in the

references as applied to the claims above for the convenience of the applicant. Although the

specified citations are representative of the teachings in the art and are applied to the specific

limitations within the individual claim, other passages and figures may apply as well. It is

respectfully requested from the applicant, in preparing the responses, to fully consider the

references in entirety as potentially teaching all or part of the claimed invention, as well as the

context of the passage as taught by the prior art or disclosed by the examiner.

33.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037.

The examiner can normally be reached on M-F 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C./
Examiner, Art Unit 2444

/Djenane M Bayard/
Primary Examiner, Art Unit 2444